

Neoacids C5-C28 Category – Comments of Environmental Defense

(Submitted via Internet May 15, 2002)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for the Neoacids C5-C28 Category; CAS# 75-98-9: Propanoic acid, 2,2-dimethyl-; CAS# 598-98-1: Propanoic acid, 2,2-dimethyl-,methyl ester; CAS#95823-36-2: Carboxylic acid, C6-8 neo; CAS# 26896-20-8: 2,2-Dimethyloctanoic acid; CAS# 68938-07-8: Fatty acids, C9-C13 neo; CAS# 72480-45-6: Fatty acids, C9-C28 neo.

The neoacids category represents a mixture of closely related compounds with similar structures, reactivities and toxicities. Commercial formulations, e.g. CAS#s CAS# 68938-07-8: Fatty acids, C9-C13 neo; CAS# 72480-45-6: Fatty acids, C9-C28 neo are mixtures of chemicals in the respective ranges of carbon number. Thus, we support the proposal of ExxonMobil Chemical Company to consider these chemicals as a category. The report submitted by ExxonMobil Chemical Company describes available data on this category; those data are somewhat limited, out of date and, in some cases, address mixtures or related chemicals. Given the structural similarities of these chemicals it would seem reasonable, in an effort to minimize animal testing, to extrapolate data from those chemicals tested in animal studies to predict risks associated with those untested in animals. However, we consider it prudent, as proposed, to conduct those tests where animal use is minimal. That is, we support the proposal to subject all chemicals in this category to testing in the Ames system, the micronucleus system, and studies of algal and daphnid toxicity to confirm the appropriateness of this category. We would also support additional study to determine biodegradation of all members of the group not previously tested. Calculations to predict photodegradation, hydrolysis and fugacity should be sufficient.

Additional comments:

1. It is stated that primary occupational exposure to chemicals in this category would be dermal. Information on possible sources of consumer or environmental exposures is not provided. Such data, while not required, would be of interest from a public health perspective. If these chemicals are not used in consumer products or released into the environment that information would be useful as well.
2. In two studies, those of propanoic acid, 2,2-diethyl- and 2,2-dimetyloctanoic acid, it is noted that the positive controls failed to induce toxicity. Thus, the quality of these studies is subject to question and they should cited as evidence of the lack of toxicity of these chemicals.
3. When synonyms are known, e.g. pivalic acid for propanoic acid, 2,2-dimethyl-, they should be listed.

Thank you for this opportunity to comment.

Hazel B. Matthews, Ph.D.
Consulting Toxicologist, Environmental Defense

Karen Florini
Senior Attorney, Environmental Defense